

myself as to the purely physico-chemical interpretation of most of the phenomena of vegetable life.—*Silliman's Journal* for Nov. 1862.

Washington, D. C., September, 1862.

*Application of Magenta Dye in Microscopical Investigations.*

At a recent meeting of the Microscopical Section of the Literary and Philosophical Society of Manchester, Dr. Roberts called attention to the aid that might be received in the examination of the structure of animal and vegetable tissue by the use of colouring materials. Magenta is peculiarly adapted for this purpose, in consequence of its solubility in simple water and its inert chemical character. The nuclear structures of animal cells are deeply tinted by magenta; and by its use the nuclei of the pale blood-corpuscles, of pus-globules, of the renal and hepatic cells, and of all epithelial structures are brought out in great beauty, tinted of a bright carbuncle-red. The red blood-disks are tinted of a faint rose-colour, and a darker red speck, not hitherto noticed, is to be observed on the periphery of the corpuscle; it undergoes some changes when treated with tannin and subsequently with caustic potash, but this point is still under investigation.

*On a new Phyllodactylus from Guayaquil.* By W. PETERS.

*Phyllodactylus Reissii*, n. sp.

*P. tuberculorum dorsalium seriebus quatuordecim, granulis occipitis minoribus quam sincipitis, scutello infralabiali primo mentali paulo minore; griseus, transversim nigro maculatus.*

This species approaches very closely to *Phyllodactylus tuberculosus* of Wiegmann, from California, but differs from it in that, 1. the tubercles of the back, which are also triangular and keeled, stand in regular, not alternating, series; the interspace between these longitudinal series in the middle of the body is always greater than the tubercles themselves: 2. the occipital region does not, as in that species, exhibit roundish granules, larger than those upon the snout and between the eyes, but is covered by very small granules of uniform size: and, 3. the *mentale* lies almost entirely between the first dilated pair of *infralabialia*, whilst in both specimens of *P. tuberculosus* the first *infralabiale* is not broader than the following one, and two large, roundish, polygonal *submentalia* bound the posterior half of the *mentale*. In this new species, behind the *mentale* and between the first pair of *infralabialia*, there is a pair of small roundish scales, followed by a third small, median, round scale. In colour the two species appear to agree. The colour is grey, with irregular black spots, which, in a young specimen, form bowed transverse bands on the neck, and broad half-rings on the tail.

This species was discovered in the vicinity of Guayaquil, by the Prussian Consul, M. Carl Reiss, who has collected other remarkable reptiles in that locality. It is known by the Spanish name of "*Salamanquesa*."—*Monatsber. der Akad. der Wiss. zu Berlin*, November 1862.